



The imminent establishment of the Australian Energy Regulator comes at a time when there is increasing debate about Australia's infrastructure and the role played by regulators like the ACCC.

Some of the more exaggerated commentators have suggested Australia is on the verge of a collapse in infrastructure due to the failure of the Australian Competition and Consumer Commission to allow them to earn a reasonable income out of their monopoly pipelines and transmission lines, leading to an investment drought.

I'll have more to say about this argument later, but it's worth noting the Ministerial Council of Energy response to the 2002 Parer Review.

The Council agreed that significant benefits had arisen under the current ACCC-administered regulation including:

- Considerable integration of the wholesale electricity markets in Victoria, New South Wales, Queensland, the ACT and South Australia.
- Substantial investment in new electricity generation and gas production, and in particular in electricity and gas transmission interconnection between states in eastern and south eastern Australia.
- Vigorous retail competition in the medium and large business sector and accelerating competition in the newly opened household and small business markets in NSW and Victoria.
- High levels of supply security, and improvements in network reliability.

However the ministers also agreed with the CoAG Review that substantial policy issues still had to be resolved if the full benefits of market reform were to be realised.

They therefore agreed to a second round of reforms to:

- Streamline and improve the quality of economic regulation across energy markets, to lower the cost and complexity of regulation facing investors.
- Improve the planning and development of electricity transmission networks to create a stable framework for efficient investment in new generation and transmission capacity.
- Further the introduction of retail competition, to increase the value of energy services to households and business.

- Further increase the penetration of natural gas, to lower energy costs and improve energy services, particularly in regional Australia, and reduce greenhouse emissions.

To put these proposals into practice, the Ministerial Council on Energy recommended that CoAG establish the Council as Australia's single energy market governance body and establish two new statutory commissions:

- The Australian Energy Market Commission (AEMC), with responsibility for rule-making and market development; and
- The Australian Energy Regulator (AER), with responsibility for market regulation and enforcement.

Australian Energy Regulator

The key principle behind the establishment of the Australian Energy Regulator was that the choice between gas and electricity should be determined by competition and not regulation.

Different approaches to regulating utilities across industries distort investment decisions and create unnecessary costs and barriers for utilities operating in more than one industry.

A single consistent and independent regulator will reduce regulatory costs to business and barriers to entry and allow both gas and electricity to develop in a way that encourages competition within, and between the two, to the benefit of industry, consumers, and ultimately the nation.

So the two new bodies were initially given responsibility for electricity wholesale and transmission in the connected (NEM) jurisdictions, extended in 2005 to include gas transmission for all other than WA.

Provision has also been made for WA and NT to join for electricity, and WA for gas under the AER, by agreement.

Roles of AER and ACCC

So how will this all work in practice?

There will be a single body of staff providing assistance to both the AER, and to the ACCC on energy matters.

This allows both to draw on the same substantial body of specialist skills and knowledge while avoiding costly, and potentially time-consuming, duplication.

The ACCC will continue to be responsible for approving mergers, access codes and undertakings, granting authorisations and for investigating and where necessary, prosecuting possible contraventions of the Trade Practices Act.

However, the AER will now assume the ACCC's current electricity and gas transmission revenue regulation functions, initially including regulating

electricity and gas transmission revenues. The AER will also assume NECA's current electricity regulatory functions, including monitoring the electricity spot market and ensuring compliance with the National Electricity Code. The AER will also be responsible for enforcement of the National Gas Code.

During 2006, the AER will become responsible for the regulation of electricity distribution and retailing, other than retail pricing. Jurisdictions may also transfer responsibility for regulation of retail prices to the AER by agreement with the Commonwealth.

The Australian Energy Market Commission, AER and ACCC will be empowered to share information that they obtain with each other where that information is relevant.

Any information provided on a confidential basis to one regulatory body, including information provided on a "commercial-in-confidence" basis, may be provided to the other regulatory body and conditions may be imposed on the use of the information. The receiving body must protect that information from unauthorised use or disclosure.

However, I should stress, despite these close links between the two, the AER will be responsible for making decisions on regulatory matters independently of the ACCC.

At all times when performing its electricity economic regulatory functions the AER will be required to act in a manner that is likely to contribute to the achievement of the national electricity market objective.

This means the AER has to look to the long term and promote greater investment, interconnection, efficiency and security of supply, and not just cheaper short term prices for end users.

The AER is therefore required, before setting revenue caps, to inform regulated transmission system operators of its considerations and allow them a reasonable opportunity to make submissions before any determination is made.

It must also provide a reasonable opportunity for the transmission system operator to recover the efficient costs in complying with various regulatory obligations.

And importantly, it must provide effective incentives to the operator to promote the efficient provision of regulated services, including the making of efficient investments.

Closer co-operation

A particularly important aspect of the new regime will be the arrangements between all three bodies, which enable the AEMC, AER and ACCC to consult and co-operate on the code change and authorisation process to avoid any duplication.

The AEMC will have specific obligations to consult in developing or considering any code changes, and any person, including industry and end-users, may make comments on proposed code changes.

There is already an agreement in-principle to the development of a national approach to energy access under the Trade Practices Act, covering electricity and gas transmission and distribution.

National electricity market objective

An important feature of the new National Electricity Law is that it provides a single clear national electricity market objective.

This objective is to promote efficient investment in, and efficient use of, electricity services for the long term interests of consumers of electricity with respect to price, quality, reliability and security of supply of electricity, and the safety, reliability and security of the national electricity system.

Investment in and use of electricity services will be efficient when services are supplied in the long run at least cost, resources including infrastructure are used to deliver the greatest possible benefit and there is innovation and investment in response to changes in consumer needs and productive opportunities.

If the National Electricity Market is efficient in an economic sense the long term economic interests of consumers in respect of price, quality, reliability, safety and security of electricity services will be maximised.

Applying an objective of economic efficiency recognises that, in a general sense, the national electricity market should be competitive, that any person wishing to enter the market should not be treated neither more nor less favourably than existing players, and that no one energy source should receive favourable treatment.

Enforcement

The Australian Energy Regulator will be responsible for bringing court proceedings in respect of breaches of the new National Electricity Law or the Rules, and issuing infringement notices.

The AER will have the power to apply directly to a magistrate for the issue of search warrants where it believes there are reasonable grounds there has been or will be a breach or even a possible breach of the National Electricity Law or the Rules.

Under the new regulatory regime, the current graduated civil penalties scheme will be replaced by a maximum civil penalty of \$100,000 and \$10,000 for every day during which the breach continues (in the case of a body corporate) and of \$20,000 and \$2,000 for an individual.

In addition to these penalties, the Court may direct the disconnection of a registered participant's loads or suspend them from purchasing or supplying electricity through the wholesale exchange.

While only the AER can bring proceedings for a breach of the National Electricity Rules, there is a dispute resolution panel to resolve disputes under the Rules between registered participants or between a registered participant and the National Electricity Market Management Company.

Decisions of the panel can be appealed, and enforced in a court.

Energy regulation under the ACCC

As I mentioned at the outset, this significant new development in energy market regulation comes at a time when Australia's infrastructure record and the role played by regulators like the ACCC has suddenly become a hot button issue.

If you were to believe some of the more exaggerated commentators and industry lobbyists, you could be forgiven for thinking investment in gas and electricity has all but ground to a halt.

The reality of course is very different.

Electricity investment - the record under ACCC regulation

In electricity transmission around \$4.2 billion has been invested in just the first five years of the ACCC regulatory regime. This investment adds around 30% to the replacement costs of transmission assets. This is very high considering the long life of these assets. Investment of nearly \$3 billion has been accommodated in ACCC decisions to date. Actual investment outcomes are likely to be even higher.

For example, TransGrid's actual investment expenditure over five years was approximately \$180 million higher than the \$885 million in the ACCC's 2000 decision (that is, a total of approximately \$1.06 billion over the regulatory period). Similarly, EnergyAustralia's actual capital expenditure was \$116.3 million for the period 2000 to 2004 compared to the \$57 million included in the ACCC's initial revenue cap decision.

The revenue caps for the next five years for Transgrid and EnergyAustralia are currently under review by the ACCC. As part of this process, the two companies have sought approval for unprecedented levels of capital expenditure: Transgrid \$2.15 billion and EnergyAustralia \$280 million. In TransGrid's case, the ACCC's draft decision allows about \$1 billion with provision for another billion if the need arises.

Now, maybe that's an aberration, so let's see if there's been an investment drought in gas.

You'd certainly think so if you've been listening to the pipeline industry, which for some time now has been claiming that the current regulatory environment

is deterring efficient investment. For example, in a media release on 28 October 2001, APIA stated:

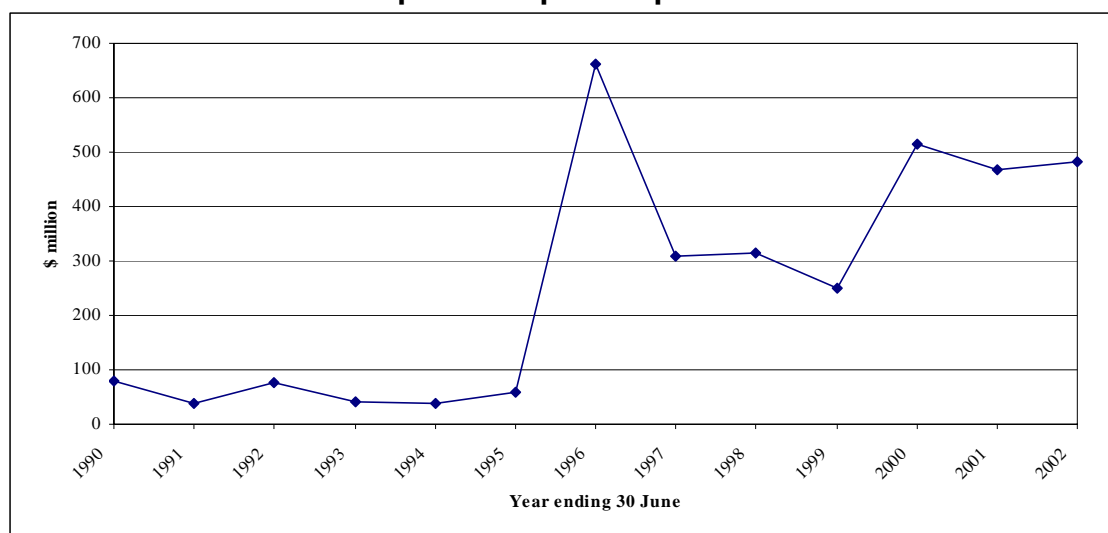
*The current regulatory quagmire is suffocating new pipeline development and requires urgent policy attention by governments.*¹

Gas infrastructure investment - the record under ACCC regulation

Well, actually, the record of investment in gas transmission under ACCC regulation has been even more impressive than it has been for electricity. According to the pipeline industry association's own figures, 14,000 km of new transmission pipelines have been laid in Australia since 1997. This amounts to a doubling in the length of transmission pipelines in Australia to 28,000 km in just seven years.

Capital expenditure on new pipelines has increased substantially. The chart below shows that capital expenditure on new transmission pipelines stepped up to new levels around the time of the reform package in the mid 1990s. Data is not available for the most recent years, but based on the industry's statements about the construction of new pipelines since 1997 we would expect the trend in the graph to have continued if not accelerated.

Transmission Pipeline Capital Expenditure 1990-2002



Source: Australian Gas Association, *Gas Statistics Australia*, various editions.

Major new pipelines to have been constructed in the past few years include:

- Eastern Gas Pipeline: Longford (Vic) to Sydney
- Tasmanian Gas Pipeline: Longford (Vic) to Tasmania
- Roma to Brisbane Pipeline looping
- SEA Gas Pipeline: Port Campbell (Vic) to Adelaide
- North Queensland Gas Pipeline: Moranbah to Townsville
- Telfer Gas Pipeline: Port Hedland to Telfer (WA)

¹ Australian Pipeline Industry Association 28 October 2001, *Media release: urgent call for national leadership in Australia's gas infrastructure development*.

In addition, a number of new pipelines are currently under advanced consideration.

- Central Ranges Pipeline: Dubbo to Tamworth
- PNG Gas Pipeline: Papua New Guinea to South East Queensland
- Trans-Territory Pipeline: Darwin to Gove (NT)

Now, it is true that most of these new pipelines are unregulated, but that just demonstrates the flexibility of the regulatory framework in distinguishing between pipelines that need regulating and those that don't.

What it certainly does NOT support is any contention that the Gas Code, as applied by regulators, is deterring investment.

Some have argued that regulation is leading to the undersizing of pipelines. However, there is no evidence to support this claim either. The case that is most often cited to support this argument is the SEA Gas pipeline from Iona in Victoria to Adelaide. Critics argue that the pipeline was built with no spare capacity and can only support the foundation load.

While it is true that the pipeline is fully contracted there are economical options for expanding the pipeline. The pipeline was built with a capacity of around 95PJ and an additional 20PJ per annum could be added relatively easily by installing an extra compressor unit.

Most importantly, the SEA Gas pipeline has nearly doubled available transmission capacity into Adelaide and there is now substantial spare capacity available on the Moomba to Adelaide pipeline.

Similar outcomes have been seen on other pipelines. The Eastern Gas pipeline from Longford to Sydney, the North Queensland gas pipeline to Townsville and the Tasmanian gas pipeline all have spare capacity in their current configurations. Additional capacity can be added with extra compression.

Investment in dependent markets by infrastructure users

This significant new investment under ACCC regulation, has also underpinned similar growth in related markets.

For example, the electricity generation industry has benefited from a significant increase in gas fired generation capacity since 1997, which is forecast to continue.² This demonstrates the increasing interdependence between gas and electricity market reforms.

Similarly, the significant increase in gas supplies in south east Australia has been supported by substantial exploration and development investment in both traditional gas fields and in coal seam methane. We are now seeing the development of new gas fields such as Geographe and Thylacine in Bass

² ESAA (2004), *Electricity Australia 2003*, pp. 32-33.

Strait west of Melbourne, Yolla in central Bass Strait and a host of coal seam methane fields in Queensland and NSW.

Lower gas prices stimulate greater usage of electricity and gas and greater activity in upstream and downstream industries. ACIL Tasman estimated that by 2013, access regulation could stimulate increased consumption of gas by the equivalent of a new market the size of NSW and the ACT combined.

This result highlights the importance of considering the impacts in related markets when assessing investment levels. For example, failure to moderate monopoly pricing in the transmission sector may inhibit the development of marginal gas fields in south east Australia reducing basin on basin competition and inhibiting competition and investment in downstream industries.

When assessing investment levels it is important to distinguish between efficient investment and investment which may represent a misallocation of resources. In some circumstances there is potential for inefficient pipeline investment to displace efficient investment in other areas. For example, if a northern pipeline project had been built prematurely with inappropriate support, it may have had an adverse impact on the development of Coal Seam Methane (CSM) which is currently taking place in Queensland and NSW.

The development of an effective access regime over the past decade also means niche players can now invest in gas exploration and development, confident they can access transmission and distribution systems on reasonable terms. A good example of this is the Sydney Gas Company which has begun selling coal seam methane into the Sydney market.

ACCC regulation – good for investors

This extraordinary level of investment across all these regulated industries begs the question of why would anyone invest such large sums of money when they are being denied the opportunity to earn a reasonable rate of return? Perhaps the returns that are being permitted under the regulatory regimes are not that unreasonable?

Since 1996, the Utilities Accumulation Index has generated a compound annual return of 17.4%, well in excess of the compound annual return of the ASX200 accumulation Index of 11.1%.

Ratings agencies have been just as positive about the prospects of regulated companies over the next three to five years. Moody's noted "the supportive regulatory frameworks and stable operating and financial profiles" while Standard and Poor's noted the "supportive and transparent regulatory regimes". Similarly, Fitch Ratings stated "the current regulatory regime appears relatively supportive for transmission entities".

The Allen Consulting Group (ACG) has also prepared a report that reviews the adequacy of the returns of regulated Australian utilities. ACG concluded

that 'the Australian regulatory framework is providing adequate scope for companies to earn appropriate returns in the energy infrastructure industry'.

In addition, the recent pipeline sales by Epic and Duke attracted substantial interest from the investment community and that recent sales of regulated assets have been at prices exceeding their regulated asset valuations.

So the market has delivered its verdict on regulation in Australia – it is actually pro-investment under ACCC regulation.

Conclusion

So you can see why we believe the investment record in gas and electricity under ACCC regulation has been pretty impressive.

However, that does not mean we believe the job is done, and no further reform is needed. In fact, the ACCC strongly believes the energy sector still has some way to go before reaching optimal efficiency and investment.

The ACCC remains concerned, for example, that the electricity generation sector is becoming increasingly concentrated, and that the potential for some generators to exercise market power is high at particular times.

There have also been recent developments in the gas sector which have caused us some concern, most recently the decision by the Australian Competition Tribunal on the Moomba Sydney gas pipeline.

We are concerned that the current approach rewards cherry picking, and encourages appeals where the applicants have nothing to lose and everything to gain by challenging specific aspects of our decisions, while leaving the rest of the decision untouched.

But if the regulatory regime is really deterring investment then the data should surely demonstrate investment lagging in both the gas and electricity transmission sectors.

In fact, the opposite is the case - both gas and electricity transmission are recording unprecedented levels of capital expenditure under the regulatory regime and those who do make these investments are out performing other sectors of the economy.

The AER will help continue the success of this regime by bringing more certainty, transparency and consistency to energy regulation.